## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	09/905.247A
Source:	IFW/6
Date Processed by STIC:	3/22/05

## ENTERED



IFW16

RAW SEQUENCE LISTING DATE: 03/22/2005
PATENT APPLICATION: US/09/905,247A TIME: 11:17:07

Input Set : A:\00384103.txt

3 <110> APPLICANT: Ke, Yi-Bao

```
4 Nie, Hui-Ling
 6 <120> TITLE OF INVENTION: MUTANT TRICHOSANTHIN
8 <130> FILE REFERENCE: 04399/000J615-US0
10 <140> CURRENT APPLICATION NUMBER: 09/905,247A
11 <141> CURRENT FILING DATE: 2001-07-13
13 <160> NUMBER OF SEQ ID NOS: 8
15 <170> SOFTWARE: PatentIn version 3.2
17 <210> SEQ ID NO: 1
18 <211> LENGTH: 289
19 <212> TYPE: PRT
20 <213> ORGANISM: Trichosanthes Kirilowii M.
22 <400> SEQUENCE: 1
24 Met Ile Arg Phe Leu Val Leu Ser Leu Leu Ile Leu Thr Leu Phe Leu
28 Thr Thr Pro Ala Val Glu Gly Asp Val Ser Phe Arg Leu Ser Gly Ala
              20
                                  25
32 Thr Ser Ser Ser Tyr Gly Val Phe Ile Ser Asn Leu Arg Lys Ala Leu
36 Pro Asn Glu Arg Lys Leu Tyr Asp Ile Pro Leu Leu Arg Ser Ser Leu
40 Pro Gly Ser Gln Arq Tyr Ala Leu Ile His Leu Thr Asn Tyr Ala Asp
                       70
44 Glu Thr Ile Ser Val Ala Ile Asp Val Thr Asn Val Tyr Ile Met Gly
                                       90
48 Tyr Arg Ala Gly Asp Thr Ser Tyr Phe Phe Asn Glu Ala Ser Ala Thr
              100
                                  105
52 Glu Ala Ala Lys Tyr Val Phe Lys Asp Ala Met Arg Lys Val Thr Leu
53 115
                              120
56 Pro Tyr Ser Gly Asn Tyr Glu Arg Leu Gln Thr Ala Ala Gly Lys Ile
     130
                          135
                                               140
60 Arg Glu Asn Ile Pro Leu Gly Leu Pro Ala Leu Asp Ser Ala Ile Thr
                      150
                                           155
64 Thr Leu Phe Tyr Tyr Asn Ala Asn Ser Ala Ala Ser Ala Leu Met Val
                                       170
                  165
68 Leu Ile Gln Ser Thr Ser Glu Ala Ala Arg Tyr Lys Phe Ile Glu Gln
72 Gln Ile Gly Lys Arg Val Asp Lys Thr Phe Leu Pro Ser Leu Ala Ile
                              200
76 Ile Ser Leu Glu Asn Ser Trp Ser Ala Leu Ser Lys Gln Ile Gln Ile
                         215
                                              220
80 Ala Ser Thr Asn Asn Gly Gln Phe Glu Ser Pro Val Val Leu Ile Asn
                                                               240
81 225
                      230
                                           235
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RAW SEQUENCE LISTING DATE: 03/22/2005
PATENT APPLICATION: US/09/905,247A TIME: 11:17:07

Input Set : A:\00384103.txt

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84 Ala Gln Asn Gln Arg Val Thr Ile Thr Asn Val Asp Ala Gly Val Val
                   245
                                        250
88 Thr Ser Asn Ile Ala Leu Leu Leu Asn Arg Asn Asn Met Ala Ala Met
                                    265
89
               260
92 Asp Asp Asp Val Pro Met Thr Gln Ser Phe Gly Cys Gly Ser Tyr Ala
93
           275
                               280
96 Leu
100 <210> SEQ ID NO: 2
101 <211> LENGTH: 870
102 <212> TYPE: DNA
103 <213> ORGANISM: Trichosanthes Kirilowii M.
105 <400> SEQUENCE: 2
106 atgatcagat tettagacet etetttgeta atteteacee tetteetaac aacteetget
                                                                            60
108 gtggagggg atgttagctt ccgtttatca ggtgcaacaa gcagttccta tggagttttc
                                                                           120
110 atttcaaatc tgagaaaagc tcttccaaat gaaaggaaac tgtacgatat ccctctgtta
                                                                           180
112 cgttccagtc ttccaggttc tcaacgctac gcattgatcc atctcacaaa ttacgccgat
114 gaaaccattt cagtggccat agacgtaacg aacgtctata ttatgggata tcgcgctggc
                                                                           300
116 qatacatcct attttttcaa cgaggcttct gcaacagaag ctgcaaaata tgtattcaaa
                                                                           360
118 qacqctatgc gaaaagttac gcttccatat tctggcaatt acgaaaggct tcaaactgct
                                                                           420
120 gcaggcaaaa taagggaaaa tattccgctt ggactccctg ctttggacag tgccattacc
                                                                           480
122 actttgtttt actacaacgc caattctgct gcgtcggcac ttattgtact cattcagtcg
                                                                           540
124 acqtctgagg ctgcgaggta taaatttatt gagcaacaaa ttgggaagcg tgttgacaaa
                                                                           600
126 accttcctac caagtttagc aattataagt ttggaaaata gttggtctgc tctctccaag
                                                                           660
128 caaattcaga tagcgagtac taataatgga cagtttgaaa gtcctgttgt gcttataaat
                                                                           720
130 qctcaaaacc aacqaqtcac qataaccaat gttgatgctg gagttgtaac ctccaacatc
                                                                           780
132 gcgttqctqc tgaatagaaa caatatggca gccatggatg acgatgttcc tatgacacag
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134 agetttggat gtggaagtta tgetatttag
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137 <210> SEQ ID NO: 3
138 <211> LENGTH: 21
139 <212> TYPE: DNA
140 <213> ORGANISM: artificial
142 <220> FEATURE:
143 <223> OTHER INFORMATION: primer
145 <400> SEQUENCE: 3
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146 gtgcaggcca tggatgttag g
149 <210> SEQ ID NO: 4
150 <211> LENGTH: 30
151 <212> TYPE: DNA
152 <213> ORGANISM: artificial
154 <220> FEATURE:
155 <223> OTHER INFORMATION: primer
157 <400> SEQUENCE: 4
158 aacaatatgg cataggatcc catggatgac
                                                                            30
161 <210> SEQ ID NO: 5
162 <211> LENGTH: 27
163 <212> TYPE: DNA
164 <213> ORGANISM: artificial
166 <220> FEATURE:
167 <223> OTHER INFORMATION: primer
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RAW SEQUENCE LISTING DATE: 03/22/2005
PATENT APPLICATION: US/09/905,247A TIME: 11:17:07

Input Set : A:\00384103.txt

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	<211> LENGTH: 27																	
			PE:															
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178	<220	)> FE	EATU	RE:														
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181	<400	)> SE	EQUE	ICE:	6													
			ag o			aa ta	aatg	ga										27
185	5 <210> SEQ ID NO: 7																	
186	5 <211> LENGTH: 27																	
	7 <212> TYPE: DNA																	
188	3 <213> ORGANISM: artificial																	
190	<220	)> FI	EATUI	RE:					•									
191	<223	3 > 07	THER	INF	ORMA'	NOI	: pr	imer										
193	<400	O> SE	EQUE	VCE:	7													
194	gtt	gtaad	cct d	ccgg	catc	gc gt	tgct	-g										27
			EQ II															
198	<21	l> L	ENGT	I: 24	17													
			YPE:															
200	<213	3 > OF	RGAN	ISM:	Tri	chosa	anthe	es Ki	irilo	owii	Μ.							
			EQUE													_		
204	Asp	Val	Ser	Phe	Arg	Leu	Ser	Gly	Ala	Thr	Ser	Ser	Ser	$\mathtt{Tyr}$		Val		
205					5					10		_			15			
208	Phe	Ile	Ser	Asn	Leu	Arg	Lys	Ala	Leu	Pro	Asn	Glu	Arg		Leu	Tyr		
209				20					25					30				
	Asp	Ile	Pro	Leu	Leu	Arg	Ser		Leu	Pro	Gly	Ser		Arg	Tyr	Ala		
213		_	35					40					45	<b>-</b>				
	Leu		His	Leu	Thr	Asn		Ala	Asp	Glu	Thr		Ser	Val	Ala	Ile		
217		50		_	<b>-</b>	_	55				_	60	~ 7	_		_		
		Val	Thr	Asn	Val	_	He	Met	GLY	Tyr		Ala	Gly	Asp	Thr			
221		_,	_,	_	~ 7	70	_		1	~1	75		-		7	80		
	Tyr	Phe	Phe	Asn		Ala	ser	Ala	Thr		Ala	Ala	ьys	Tyr		Pne		
225	_	_			85	_		_,	_	90	_	_	~1		95	<b>a</b> 1		
	Lys	Asp	Ala		Arg	Lys	vai	Thr		Pro	Tyr	ser	GLŸ		Tyr	GIU		
229	_	_	~7	100			<b>~</b> 1	<b>.</b> .	105	<b>.</b>	α1 ·	<b>3</b>	<b>73</b> -	110		<b>G</b> 1		
	Arg	Leu	Gln	Thr	Ala	Ala	GIY		TTE	Arg	GIu	Asn		Pro	Leu	GIY		
233	_	_	115	_	_	_		120	1	em1.	<b>.</b>	D1	125	m	3	77-		
	Leu		Ala	Leu	Asp	ser		тте	Thr	Thr	Leu		Tyr	Tyr	Asn	Ala		
237	_	130			_		135			_		140	_	1	_	<b>~</b> 3		
		Ser	Ala	Ala	Ser		Leu	Met	Val	Leu		GIn	ser	Thr	ser			
	145		_	_	_	150		~ 7		~ 7	155	~ 3	_	_	7	160		
	Ala	Ala	Arg	Tyr	_	Phe	He	Glu	GIn		шe	GIY	ьуs	Arg		Asp		
245		m)	<b>D1</b>	<b>.</b>	165	0.	<b>T</b>	7 T -	<b>-</b> 7.	170	<b>a</b>	T	<b>a</b> 3	7	175	m		
	гàг	Tnr	Phe		Pro	ser	ьeu	АТА		тте	ser	ьeu	GLU		ser	Trp		
249	<b>a</b> .	<b>7.7</b> .	<b>.</b>	180	<b>T</b>	<b>~</b> 1	<b>-</b> 3.	<b>~1</b>	185	n 3 -	0	m\	71	190	<b>~1</b>	C1		
	ser	A1a	Leu	ser	гàг	GIN	тте		тте	АТа	ser	inr		ASN	σтĀ	GIN		
253			195					200					205					

RAW SEQUENCE LISTING

DAIE.

DATE: 03/22/2005

PATENT APPLICATION: US/09/905,247A

TIME: 11:17:07

Input Set : A:\00384103.txt

Output Set: N:\CRF4\03222005\I905247A.raw

256 Phe Glu Ser Pro Val Val Leu Ile Asn Ala Gln Asn Gln Arg Val Thr

257 210 215 220

260 Ile Thr Asn Val Asp Ala Gly Val Val Thr Ser Asn Ile Ala Leu Leu

261 225 230 235 240

264 Leu Asn Arg Asn Asn Met Ala

265 245

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 03/22/2005 PATENT APPLICATION: US/09/905,247A TIME: 11:17:08

Input Set : A:\00384103.txt

Output Set: N:\CRF4\03222005\I905247A.raw

## Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:3,4,5,6,7

VERIFICATION SUMMARY

DATE: 03/22/2005

PATENT APPLICATION: US/09/905,247A

TIME: 11:17:08

Input Set : A:\00384103.txt